

# The Beacon Hill Institute:

# Virginia STAMP Model and the Jefferson Institute

# State Tax Reform Proposal

**THE BEACON HILL INSTITUTE**  
AT SUFFOLK UNIVERSITY

# Outline

- BHI Approach to Modeling
- Modeling the Sales and BPOL Taxes
  - Consumption, investment, value added and intermediate goods
- Modeling the Income Tax & M&T tax
  - Factor demand and the cost of labor and capital

# BHI's Approach to Tax Policy

- Direct taxes are penalties on working and saving
- Subsidies are rewards for leisure and dissaving
- Supply equals demand (no Keynesian elements)
- Analysis needs to be “dynamic”:  
a cut in a tax rate expands private  
economic activity



# Tax Policy Analysis:

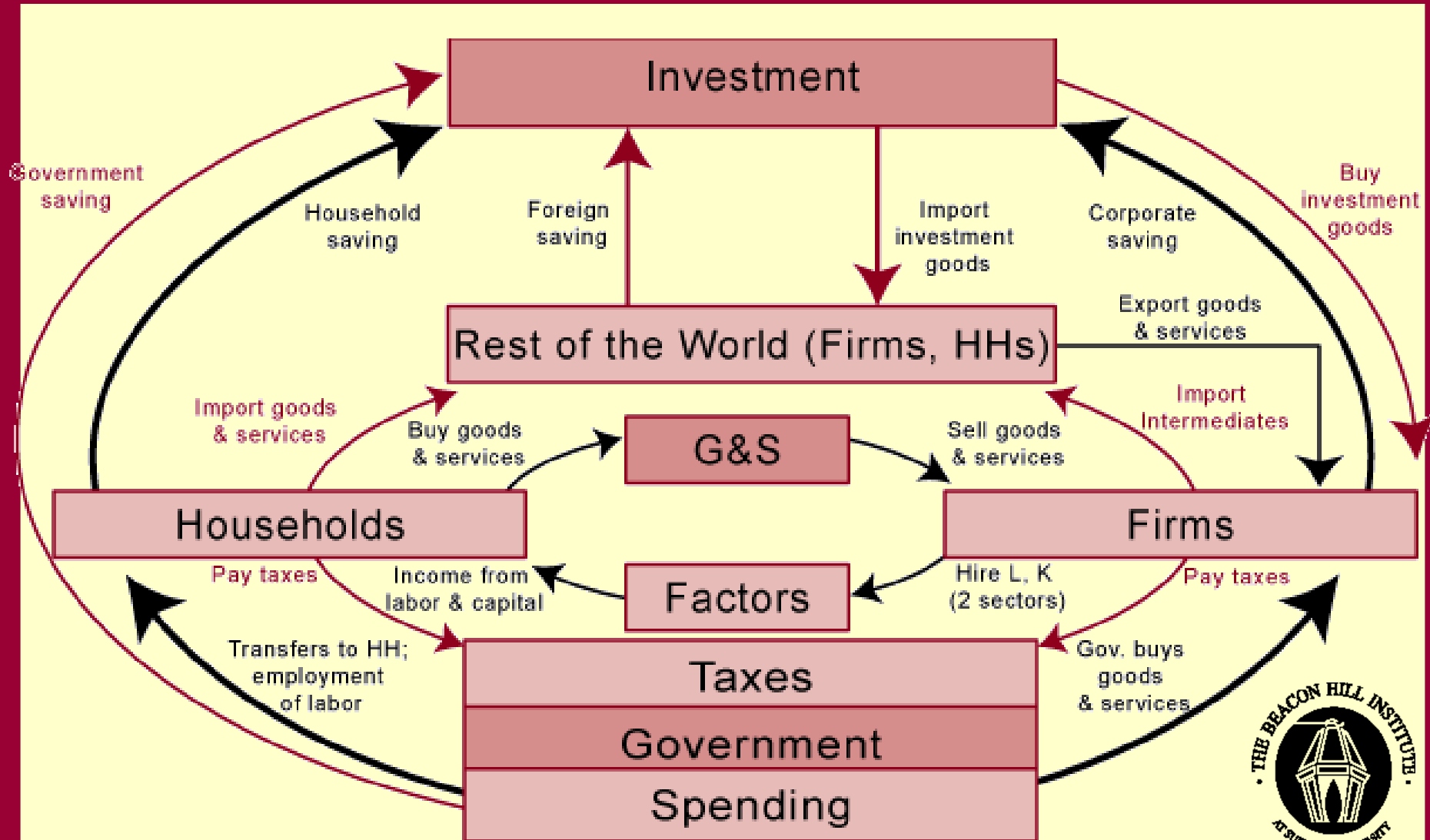
BHI's method is to build models that:

- Incorporate all markets and all important taxes
- Are solved as a system of equations, parameterized with realistic elasticities
- Are transparent: report all equations and elasticities

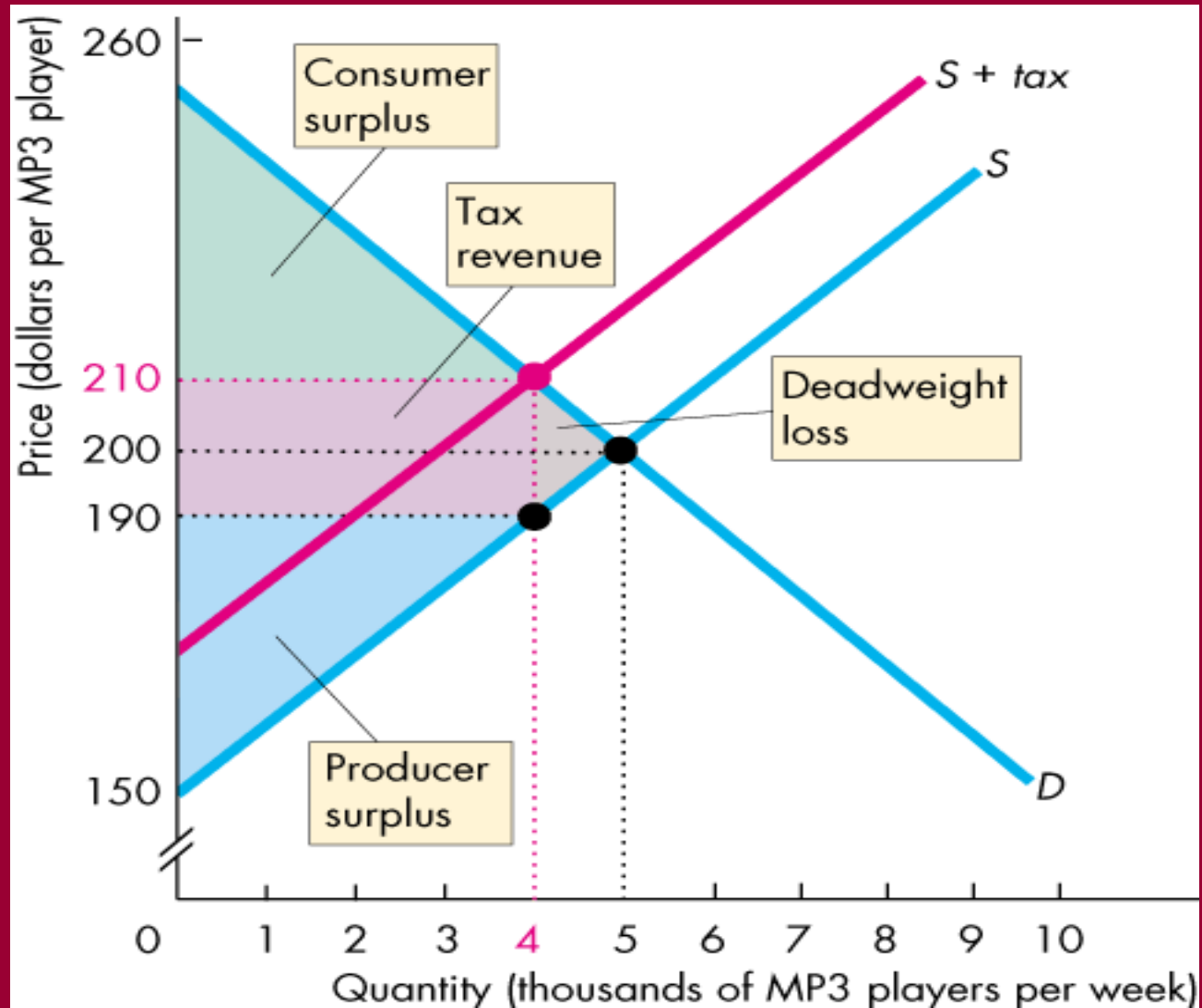


# BHI CGE Models

## Capturing the complexity of the Economy



# Economics of Taxation



# Sales and BPOL Taxes

- Increase the price of:
  - goods to the final user, and reduces the quantity of consumption;
  - some inputs to suppliers if they are the final user, eg office supplies, distribution of G & S, and construction supplies;
  - some purchases of investment equipment;
  - Increases government income
  -

# Expansion of VA Sales Tax Base

- Expand sales tax to all services except healthcare
- Loss of private sector 29,000 jobs
- Investment drops by \$208 million
- Real Disposable Income drops by \$2.1 billion
- Real GDP falls by \$3.8 billion
- Dynamic Revenue Gain of \$1.9 billion



# Eliminate the BPOL Tax

- Gain of 11,800 private sector jobs
- Investment increases by \$94 million
- Real Disposable Income increases by \$900 million
- Real GDP increases by \$1.4 billion
- Dynamic Revenue gain of \$581 million

# Capital Taxes: M&T, Merchants Capital Tax

- Increase the after tax rental rate (cost) of capital relative to labor:
  - firms substitute labor for capital
  - Level of Investment is lower
- Increases government income

# Eliminate M&T and MC Taxes

- Gain of 1,000 private sector jobs
- Investment increases by \$425 million
- Real Disposable Income increases by \$100 million
- Real GDP increases by \$4.5 million
- Dynamic Revenue loss of \$183 million

# Personal Income Tax

- These taxes are imposed on the rental rate (payments to) to labor in the form of wages and salaries and the return on investment or capital.
- They raise the after tax rental rate (cost) of labor and capital, reducing the quantity demanded and supplied for each.

# Personal Income Tax Changes

- Eliminate bottom two brackets, cut others by 9.25%
- Gain of 96,000 private sector jobs
- Investment increases by \$17 million
- Real Disposable Income increases by \$4.3 billion
- Real GDP increases by \$11.2 billion
- Dynamic Revenue loss of \$1.1 billion

# Capital and Personal Income Taxes Reduce Factor Income

- Factor income is dependent on rental rate of labor and capital and factor demand across private industry and governments.
- Household gross factor income: Factor incomes, less factor payments to rest of the world and less employee portion of FICA.

# Household Disposable Income

- Household disposable income: Gross income, less personal income tax and residential property tax, plus transfer payments.
- Taxes reduce households disposable Income, leading to a second order decrease in private consumption.
- Reduces domestic demand for Goods and Services, reducing factor demand for labor and capital, lowering factor incomes

# Total Tax Changes

- $96,000 + 1,000 + 11,800 - 29,000 = 79,800$  jobs
- $\$17 \text{ m} + \$425 \text{ m} + \$94 \text{ m} - \$208 \text{ m} = \$328 \text{ million}$  investment
- $\$4.3 \text{ b} + \$100 \text{ m} + \$900 \text{ m} - \$2.1 \text{ b} = \$3.2 \text{ billion}$  real disposable income
- $\$11.2 \text{ b} + 4.5 \text{ m} \$1.4 \text{ b} - \$3.8 \text{ b} = \$8.9 \text{ billion}$  real RGD
- $\$-1.1 \text{ b} - \$183 \text{ m} - \$581 \text{ m} + \$1.9 \text{ b} = \$36 \text{ million}$  dynamic revenue gain





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